

REMARKS

In accordance with the foregoing, the claims **1** and **26** have been amended, claims **9-11** have been cancelled, and claims **27** and **28** have been added. Therefore, claims **1-8** and **12-28** are pending and under reconsideration, which is respectfully requested.

No new matter has been added and accordingly, entry and approval of the claims **1**, **26-28** are respectfully requested.

STATUS OF THE CLAIMS:

Claims **1-26** are rejected.

Claims **9-11** are cancelled.

Claims **1** and **26** are amended.

Claims **27** and **28** are added.

ITEMS 3-4: REJECTION OF CLAIMS 1, 3-4, 6, 12, 14 AND 26 UNDER 35 U.S.C. 102(b) AS BEING ANTICIPATED BY KELSEY (US 6,093,786).

Independent claims **1** and **26** have been amended to recite that the polymer component contains 10 to 80 % by mole of trimethylene terephthalate repeating units and 90 to 20 % by mole of repeating units of at least one resin selected from the group consisting of polyethylene terephthalate, polybutylene terephthalate, a polycarbonate and a polyolefin. New independent claims **27** and **28** are directed to a polymer blend.

Antecedent basis for the above amendments can be found in page 10, lines 1-21 and page 8, lines 21-26 of the specification.

Therefore, claims **9-11** have been cancelled.

The Examiner asserts that **Kelsey** teaches a polytrimethylene terephthalate composition comprising a polymer component and Irganox 1098 which fulfills the structural requirements of Component C wherein more than 50 mole percent is composed of trimethylene terephthalate repeating units.

However, amended independent claims **1** and **26** have a feature that from 10 to 80% by mole of the polymer component in the composition is composed of trimethylene terephthalate

repeating units, and from 90 to 20% by mole of the polymer component in the composition is composed of repeating units of at least one resin selected from the group **consisting of a polyethylene terephthalate, polybutylene terephthalate, a polycarbonate and a polyolefin.**

Kelsey discloses that the starting material may include diol of ethylene glycol and diacid of 2,6-naphthalene dicarboxylic acid (column 2, lines 45-49), which synthesizes polytrimethylene naphthalate(PEN). However, polytrimethylene naphthalate is not included in the claimed Markush grouping. In addition, *Kelsey* does not disclose and/or suggest the produced polytrimethylene terephthalate(PTT) including other polymers such as **polyethylene terephthalate, polybutylene terephthalate, polycarbonate and polyolefin** in a way of either alloying or blending.

Accordingly, *Kelsey* does not anticipate the instant invention of claims **1 and 26**. Therefore, the rejection of independent claims **1 and 26** and dependent claims **3-4, 6, 12 and 14** under 35 USC 102(b) should be withdrawn.

ITEMS 5-6: REJECTION OF CLAIMS 2, 9-11 AND 15-17 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER KELSEY (US 6,093,786).

The Examiner asserts that regarding claim **9, 10 and 11**, *Kelsey* teaches a polytrimethylene terephthalate composition wherein more than 50 mol percent is composed of trimethylene terephthalate repeating units and the Examiner also asserts that *Kelsey* teaches that the remaining less than 50 mol percent may be polyethylene naphthalate.

However, as stated in ITEMS 3-4, *Kelsey* does not disclose and/or suggest the produced polytrimethylene terephthalate(PTT) including polymers such as **polyethylene terephthalate, polybutylene terephthalate, polycarbonate and polyolefin** by a way of a repeating unit of a copolymer or a mixed component of a blend (see page 8, lines 21-26 of the specification for the word of blend).

In addition, claims **9, 10, and 11** have been canceled and incorporated into claims **1 and 26**, as well as new claims **27 and 28**.

Accordingly, Applicants respectfully submit that an obviousness rejection cannot be based on *Kelsey* and allowance of the amended independent claims **1 and 26** and depending claims **2 and 15-17** is respectfully requested.

ITEM 7: REJECTION OF CLAIMS 1, 5 AND 7 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER GROSS ET AL (US 6,569,958).

The Examiner asserts that regarding claim 1, **Gross** teaches a polytrimethylene terephthalate composition comprising a polymer component of homopolymer polytrimethylene terephthalate and at least one component selected from the group consisting of: a combination of Component A (tetrakis(methylene (3,5-di-tert-butyl-4-hydroxy-hydrocinnamate))methane, also known as Irganox 1010 and Component B (Irganox 5057 which is an N-phenyl-reaction product with 2,4,4-trimethylpentene).

However, **Gross** does not disclose and/or suggest the feature that from 10 to 80% by mole of the polymer component in the composition is polytrimethylene terephthalate composed of trimethylene terephthalate repeating units, and from 90 to 20% by mole of the polymer component in the composition is composed of repeating units of at least one resin selected from the group **consisting of a polyethylene terephthalate, polybutylene terephthalate, a polycarbonate and a polyolefin.**

Accordingly, Applicants respectfully submit that an obviousness rejection cannot be based on **Gross** and allowance of the amended independent claim 1 and depending claims 5 and 7 is respectfully requested.

ITEM 8: REJECTION OF CLAIMS 1, 7-8 AND 12-13 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER HARTMANN (US 2002/0054964) IN VIEW OF KELSEY (US 6,093,786).

The Examiner asserts that regarding claim 1, **Hartmann** '964 teaches a polytrimethylene terephthalate composition comprising a polymer component and Irganox 1076 (which fulfills the structural requirements of Component A). The Examiner notes that as **Hartmann** '964 elucidates polytrimethylene terephthalate in paragraph [0036], this is taken to be a homopolymer of polytrimethylene terephthalate and thus meets the limitation of 100 mol% of the polymer is polytrimethylene terephthalate repeat units.

However, the Examiner also asserts that **Hartmann** '964 fails to teach that the specific components (I), (II) or (III) of claim 1. **Hartmann** '964 discloses a thermoplastic silicone elastomer, but does not disclose a polytrimethylene terephthalate composition comprising a polymer component and component A, B, and/or C, as claimed.

The independent claims have been revised to require that the polymer component contains not only polytrimethylene terephthalate repeating units, but also repeating units associated with a different polymer. In the paragraph bridging pages 5 and 6 of the Office Action, the Examiner refers to a homopolymer containing 100 mol % of polytrimethylene terephthalate repeating units. This is contrary to what is claimed. As described above, **Kelsey** does not compensate for this deficiency. That is, **Kelsey** does not disclose the use of polyethylene terephthalate, polybutylene terephthalate, a polycarbonate and/or a polyolefin.

It must also be noted that the independent claims require at least one of components I, II and III. Each of components I, II and III includes a compound having a secondary amine structure (b). That is, both component B and C require the secondary amine structure (b). On the other hand, **Hartmann** appears to be only concerned with a phenolic antioxidant. Phenolic antioxidants are related to component A and group (a). Without the secondary amine structure (b), the claim limitations are not satisfied. It is submitted that there is no suggestion, either in **Hartmann** or **Kelsey**, to incorporate a secondary amine structure (b) into **Hartmann**.

Accordingly, Applicants respectfully submit that an obviousness rejection cannot be based on **Hartmann** '964 in view of **Kelsey** and allowance of the amended independent claim 1 and depending claims 7-8 and 12-13 is respectfully requested.

ITEM 9: REJECTION OF CLAIMS 2 AND 15-19 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER HARTMANN (US 2002/0054964) IN VIEW OF KELSEY (US 6,093,786) AND HARTMANN (US 2002/0105108).

Claims 2 and 15-19 depend on allowable independent claim 1. **Hartmann** 2002/0105108 does not compensate for the deficiencies discussed above. Therefore, the obviousness rejection based on **Hartmann** '964 in view of **Kelsey** and **Hartmann** '108 should be withdrawn and allowance of the amended independent claim 1 and depending claims 2 and 15-19 is respectfully requested.

ITEM 10: REJECTION OF CLAIMS 20-25 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER HARTMANN (US 2002/0054964) IN VIEW OF KELSEY (US 6,093,786), HARTMANN (US 2002/0105108) AND KURIAN ET AL (US 6,335,421).

Claims 20-25 are depending on allowable independent claim 1. Therefore, the obviousness rejection based on Hartmann '964 in view of Kelsey, Hartmann '108 and Kurian et al should be withdrawn and allowance of the amended independent claim 1 and depending claims 20-25 is respectfully requested.

CONCLUSION

Thus, it is believed that all rejections have been removed, and the present application is now in condition for allowance.

Reconsideration and early favorable action on the claims are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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